despite the tremendous progress made in Reserve Bank operation as the result of war necessities, there were distortions and stretchings of various provisions of the Act. Not yet has there been sufficient experience in times of stable business, to permit a conclusion as to the complete sufficiency of the Reserve System but the foundation has been laid securely. The makers of the law builded well and in the face of very great difficulties.

The Purposes of the Federal Reserve Act as Shown By Its Explicit Provisions

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WHAT were the chief purposes of the framers of the Federal Reserve Act as those purposes are revealed by the explicit provisions of the Act itself? In answering this question it will be well to consider (1) the framework of the Federal Reserve System, namely, its plan of organization and control, and (2) its functions.

The chief contribution made by the framers of the Federal Reserve Act was in the plan of organization they proposed, the functions assigned to the Federal Reserve Banks being essentially the same as those recommended a few years previously for the National Reserve Association of the Aldrich Plan, as well as those of a number of central bank plans still earlier proposed in this country. They are, moreover, not very different from the functions performed by the leading central banks of Europe. In this paper, therefore, attention will be given almost exclusively to the framework of the plan.

REASONS FOR A GROUP OF CENTRAL BANKS

To foreigners who study the Federal Reserve System, the most striking fact about it is that it should have twelve central banks with comparatively few branches, instead of one central bank with many branches. There was nothing like this anywhere else in the world, at the time the Federal Reserve System was created and, so far as I know, there is no historical example of such a group of central banks.

There were two important economic reasons for providing a group of central banks instead of one central bank. These were:

(1) The need of a system that was adaptable to widely different conditions in different parts of an immense country like the United States, with particular reference to rediscount rates, and, (2) the desire to decentralize the control of the American money market in such a way as to weaken New York's alleged domination.

One serious objection to a single central bank in the United States was the difficulty arising from the fact that interest and discount rates for essentially the same kinds of paper usually differed considerably in different parts of the country; rates in the West and South normally ruled higher than those in the Middle West, and rates in the Middle West normally ruled higher than those in New England and the Middle States. It was believed that the establishment by a single bank of

a single rediscount rate applicable throughout the United States to the same kind of paper, would be of little use to New England and the Middle States if the rate were adjusted to the higher level of rates prevailing in the West and South, and that, on the other hand, if the rate were made as low as that prevailing in the East, it would be so attractive to the West and South as to result in a dangerous expansion of the bank's loans in those sections at the expense of the East. In time, of course, such a flow of funds from the East to the West and South would equalize rates throughout the country; but the amounts of capital involved were so great that it was felt that a long period of time would be required to achieve territorial equalization of rates, and the East was not favorably disposed to the drain of its funds to the West and South that such a movement toward equalization seemed to require. The maintenance by a central bank of different discount rates in different parts of the country on the same kind of paper, it was believed, would be politically (and probably also legally) impossible.

Although there were other kinds of desirable adaptability to different economic conditions in different parts of the country, it appeared on close examination that for most purposes sufficient autonomy could not be given to branches of a single central bank to enable them to adapt the character of their services to varying local conditions.

The second reason for preferring a group of banks was the widespread feeling that the banking system of the country was being unduly centralized in New York City, where a very large part of the deposited bank reserves of the country were held and where control was widely believed to be exercised, *sub rosa*, by a handful of so-called Wall Street banks. The Pujo Committee's "Money Trust" investigation had strengthened this popular belief, particularly through the West and South. A single central bank, it was widely believed, would be increasingly dominated by New York, while a group of banks, it was argued, would weaken New York's control by causing the growth of a group of territorially centralized money markets, each of which would handle a large part of the business of its own district, and, to a greater or less extent, would compete with New York for open-market business.

These were the main reasons why the law provided for eight to twelve banks instead of one, and why the New York district was limited to such a small area with a strong Boston district at the northeast and a strong Philadelphia district at the south.

CHARACTER OF FEDERAL RESERVE BOARD

The proposal that the central governing board of the new system should be composed entirely of government appointees was met by a strong protest throughout the country, particularly from the banking fraternity. It was claimed by many that such a board would inevitably be constituted of inefficient political appointees and would be politically controlled, thereby making the Federal Reserve System the football of politics. Much was made of the claim that the bankers, who presumably would furnish the entire capital of the Federal Reserve Banks and who would be responsible for it to their stockholders and depositors, would have no voice whatever in the appointment of the board which was to control the broad policies of the new banks. This central board of seven men to be appointed exclu-

sively by the President was in striking contrast to the central board proposed by Senator Aldrich. Under his plan the board was to consist of forty-six directors of whom forty-two, including the governor and the two deputy-governors, were to be appointed directly or indirectly by bankers.

Despite the vigorous opposition to the proposal that the central board of the Federal Reserve System be appointed entirely by the President, the proposal was adopted. It should be noted that this board was not to do a banking business. That was to be done exclusively by the twelve banks, six of the nine members of the board of directors of each being elected by the member banks. It was primarily in the field of determining broad questions of policy that the Federal Reserve Board was to function, and in this field, it was claimed, the need was for financial statesmen who would view their problems broadly from the standpoint of public service. This was true because the functions proposed for the Federal Reserve System, like those that had previously been proposed for the National Reserve Association of the Aldrich Plan, were affected with a great public interest. On this subject the writer in 1913, summarizing the conclusions of an address given by him in 1911, said as follows:[1]

Is not the National Reserve Association too much of a public institution to be so largely controlled by one type of business interest, that is, that of the banking fraternity? We must get away from the prevalent idea that the National Reserve Association is to be principally a bankers' affair just because its capital is to be furnished entirely by banks. We must bear in mind that its public deposits alone will for some time probably exceed its paid-up capital, that the funds which the banks deposit with the Association will be chiefly those which the public has deposited with the banks, and that the paper which the banks rediscount with it will be that of the business community. We must not forget that the National Reserve Association is to have a tremendous public power and responsibility, through its right to fix the bank rate of discount, its power over the foreign exchanges and gold shipments, its right to issue the country's only elastic paper currency, its supervisory power over banks, and its function of holding a large percentage of the country's reserve money, together with the privilege of having its promises to pay, in the form of its deposits and bank notes, counted as lawful reserve money for banks. Now it is possible, although by no means certain, that the interests of bankers as a class and those of the public are identical. It is certain, however, that history furnishes numerous instances in which what the public believed to be its interest and what bankers believed to be theirs were in conflict. One need not go back farther than the last two or three years to find a striking instance of the kind in the United States. I refer to the movement leading to the establishment of the United States postal saving depositories, which was opposed vigorously and almost unanimously by the banking fraternity. It is furthermore true, and perhaps of greater importance, that a large element in the country believes the interests of bankers to be in conflict with those of the general public on a great many vital questions.

Although Congress and the President did not budge an inch in their insistence upon making the Federal Reserve Board an exclusively government board, they threw a sop to the opposition by inserting in the law the provision for a "Federal Advisory Council" of bankers, one member to be selected annually by the board of directors of each Federal Reserve

[1] See "Banking Reform in the United States," *American Economic Review Supplement*, March, 1913, pp. 54 and 55; and "Some Public Aspects of the Aldrich Plan," *Journal of Political Economy*, December, 1911, *pp*. 819–830.

Bank from its own district, making the number of members in the Council equal to the number of Federal Reserve Banks. The relations of this Council to the Federal Reserve Board were to be entirely advisory. Neither voting nor veto power was given to the Council, which was required to meet at least four times a year and oftener, if called by the Federal Reserve Board. Members of the Federal Reserve Board who were to be "on the job" three hundred days in the year, it was generally thought, would not be likely to be greatly influenced as to their own job by a group of advisers coming from widely separated parts of the country who would meet infrequently. Happily during the last year or so, the Advisory Council has belied this expectation.

FEDERAL RESERVE BANK DIRECTORATES

In its provisions for the directorates of the Federal Reserve Banks, the Act well reveals the purpose of its framers to create a group of federated organizations that at one and the same time would (1) recognize the public's dominant interest in matters of broad policy; would (2) recognize the dominant interest of the banker and the banker's business customer in the narrower banking questions, such as the goodness of the paper against which advances were to be made, the amounts to be loaned individual member banks, the quality of open-market investments, and the like, and would (3) permit of a democratic control among the member banks of this banking business.

Of the nine members of the board of directors, three (including the chairman and the vice-chairman of the board) are Class C directors, who are appointed by the Federal Reserve Board and are directly responsible to that Board. Their salaries are fixed by the Federal Reserve Board, and that Board may suspend Class C directors or remove them from office. These directors are the connecting links between the central Board and the Federal Reserve Bank. They keep the central Board informed as to the developments in each Federal Reserve Bank. It is through them that the Federal Reserve Board exercises its control over the broad policies of the Federal Reserve System and compels the necessary teamwork among the twelve banks.

This same sort of representation and control on the part of the Federal Reserve Board is carried through to the branches of the Federal Reserve Banks, each of which is operated under the supervision of a board of directors "to consist of not more than seven nor less than three directors, of whom a majority of one shall be appointed by the Federal Reserve Bank of the district, and the remaining directors by the Federal Reserve Board."

The other six directors, constituting two-thirds of the board, are elected by the member banks. Their concern is primarily with the banking operations of the bank, notably the character and quantity of its rediscounts and collateral loans for member banks, its open-market operations, its discount rate policy (subject to the approval of the Federal Reserve Board), and the like. Of course, the Class C directors likewise vote on these banking questions.

To every bank loan and to every bank deposit, there are at least two directly interested parties, the bank and the bank's customer. The bank's customer is usually a business man or a business concern (using those terms in their broader meaning). In recognition of this dual interest in most banking operations, the Federal Re-

serve Act provided that, of the six directors who were to be primarily concerned with the direct banking operations of the Federal Reserve Bank, three, known as Class A directors, should "be representatives of the stockholding banks"—as a matter of fact they are practically always bankers—and that the other three, known as Class B directors, should at the time of their election be "actively engaged in their district in commerce, agriculture, or some other industrial pursuit." Here is the recognition of the interest of the non-banking business community in the banking operations of the Federal Reserve Banks.

The purpose of democratizing such control over the Federal Reserve Banks as should be exercised by Class A and Class B directors is seen in the rather unique provisions for the election of directors contained in the Act as originally passed. This Act divided all member banks of each district into three groups, each group containing "as nearly as may be one-third of the aggregate number of the member banks of the district and . . . [to] consist, as nearly as may be, of banks of similar capitalization." Each of these groups was to elect one Class A director and one Class B director, on the democratic plan of "one bank one vote" regardless of the size of the bank. Under this plan the peculiar interests of the small banks, of the middle-sized banks and of the large banks, respectively, were assured representation. The democracy of a plan that gave the same voting power to the bank of $25,000 capital that it gave to the bank of $250,000 capital and to that of $25,000,000 capital made a strong appeal to those who feared "Money Trust" control.

By an act of September 26, 1918, the method of choosing directors was changed through the repeal of the requirement that each of the three groups of banks should "contain as nearly as may be one-third of the aggregate number of the member banks of the district . . ." and the substitution therefor of the provision that "the Federal Reserve Board shall classify the member banks of the district into three general groups or divisions," without placing any restriction whatever upon the number of banks that should be placed in each group. This looked like a step away from the original democratic principle of one bank one vote—a principle followed in the elections of most of the clearing house associations. It clearly increased the power of the Federal Reserve Board over the election of Class A and Class B directors.

How far the original plan of grouping the member banks, for purposes of electing directors, into three approximately equal groups of banks has since been departed from by the Federal Reserve Board in exercising the authority conferred by the above-mentioned amendment, will be seen from the following figures. A week after the amendment had been passed the Board made a reclassification of member banks for the twelve districts, which, when taken by totals for all districts, placed 515 banks or 6.4 per cent of the total number (i.e., 8,099) in group I, the large-bank group; 2,384 banks, or 29.4 of the total, in group II, the middle-sized-bank group; and 5,200 banks, or 64.2 per cent of the total, in group III, the small-sized-bank group. According to this rearrangement, therefore, the 515 largest banks in the respective districts could now elect the same number of Class A and Class B directors that the 5,200 smallest banks could elect, or the same number that the 2,700 largest

banks could previously have elected. There may have been good reasons for this great change in the grouping, increasing the power of the large bank at the expense of the smaller, but, so far as I know, the Federal Reserve Board has given little or no publicity to the change itself or to its reasons for making it. The amendment authorizing the change was passed at the Board's request.

Membership

Membership in the Federal Reserve System was limited to commercial banks and trust companies, showing that the System was expected to function in the field of short-time active business operations rather than in the fields of capital and real estate transactions occupied so largely by savings banks, private banks and investment houses. National banks, operating as they did under Federal charters, were expected to play the game according to the new and improved national rules laid down by the Federal Reserve Act. If they were unwilling to accept these rules they were invited to get out of the national system. State banks and trust companies possessing adequate capitals and conforming in their operations to sound banking practices were permitted and encouraged to become members of the Federal Reserve System. The Act clearly contemplated a large membership of state institutions.

Capital and Dividends

It was hoped that enough banks would enter the System from each district to assure an adequate capital for each Federal Reserve Bank, but among bankers the opposition to the Glass-Owen bill had been so pronounced and widespread, and threats had been so frequently expressed by officials of national banks that they would give up their Federal charters and reorganize as state institutions if the Glass-Owen bill in anything like its existing form should become a law, that the framers of the Act undertook to assure the establishment of a Federal Reserve Bank in each district by providing that, if sufficient banks should not join the System, the capital could be subscribed by the public or by the government itself.

In the early stages of the bill through Congress the required stock subscription was based upon the capital of the member banks, but the basis was later changed to capital and surplus, the percentage required being reduced. The distinction between a bank's capital and its surplus is at best a rather arbitrary one and is essentially legal, rather than economic. Had the basis been capital alone, a bank desiring to keep its subscription to Federal Reserve Bank stock low, would have been encouraged to increase its surplus at the expense of its capital.

Distribution of Profits

The original Act provided that from the net earnings an annual dividend of six per cent, which should be cumulative, should be paid on the paid-in capital stock; that, of the balance of the net earnings, one-half should be paid into a surplus fund until the surplus should amount to 40 per cent of the *paid-in* capital, and that the remainder should be paid to the United States as a franchise tax. An amendment of March 3, 1919, provided that after the six per cent dividend is paid the whole of the net earnings of each bank shall be carried to surplus until the surplus shall amount to 100 per cent of the *subscribed* capital, and that, after this 100 per cent surplus shall have been accumulated, 10 per cent of the net

earnings, above the dividend charges, shall be transferred to surplus indefinitely. A bank withdrawing from the System receives back the capital it has paid in and any accumulated dividends but cannot take one cent of the accumulated surplus. The two hundred odd millions of surplus already accumulated by the twelve Banks would therefore go to the government should the Banks go out of business.

Net earnings paid to the United States by the Federal Reserve Banks, the law provided, "shall in the discretion of the Secretary, be used to supplement the gold reserve held against outstanding United States notes, or shall be applied to the reduction of the outstanding bonded indebtedness of the United States. . . ."

The significance of these provisions concerning earnings, briefly stated, is apparently as follows: The Federal Reserve Banks are to be administered with primary reference to the public service, and member banks are to receive their returns chiefly in the services rendered them directly by the Federal Reserve Banks and in the safer and more stable financial conditions throughout the country which the Federal Reserve System creates. The desire for large cash profits is to have no influence in determining the policies of the Federal Reserve Banks. Their actuating motives must be found in service to the member banks and, through the banks, to the public. If, incidentally, large profits are realized they must go to the government.

To date the profits of the twelve Federal Reserve Banks have been so large, chiefly as the result of war and post-war demands upon the System, that it seems improbable that the call for the other 3 per cent of stock subscription authorized by the Act will ever be made. On November 9, 1921, the paid-in capital and accumulated surplus of the twelve Federal Reserve Banks was $317,000,000, an amount $28,000,000 greater than 6 per cent of the capital and surplus of all the member banks plus 40 per cent, namely, the maximum capital and surplus contemplated by the Act of 1913 for the twelve Federal Reserve Banks.

When the Federal Reserve Act was passed there was a widespread hope among economists and bankers that any profits accruing to the government through this franchise tax would be used for the first of the two purposes authorized, i.e., "to supplement the gold reserve held against outstanding United States notes." The increase of this reserve by slightly less than $200,000,000 would have been sufficient to transform all of our greenbacks into gold certificates and thus retire from circulation one of the most undesirable elements in our motley collection of paper money. Of the $117,000,000 so far either paid to the government in franchise taxes by the twelve Banks or due and set aside by them for the government, all has been absorbed by the war debt and not a dollar has gone into the building up of the reserve against greenbacks.

Functions of Federal Reserve Banks

As stated at the beginning, the limits of space will permit only a few words concerning the purposes of the Act as revealed in the functions assigned the Federal Reserve Banks. These functions are clearly defined in the Act and their general character is understood by all students of the System. They are, moreover, broadly speaking, the functions performed by central banks throughout the world. Chief among them are the following:

(1) The centralization and mobilization of bank reserves;

(2) The rendering more elastic of bank credit, both bank notes and bank deposits;

(3) The creation of a more efficient and cheaper clearing and collection system for checks;

(4) The improvement of facilities for financing our import and export trade at home, and finally

(5) The providing of a satisfactory depository and fiscal agency for the Federal government.

Reserves are centralized through the requirement that legal reserves of member banks shall consist exclusively of deposits in their respective Federal Reserve Banks. These reserves are largely centralized in the Gold Settlement Fund and the Federal Reserve Agents' Fund, and are rendered mobile through interbank discounts and through open market operations.

Elasticity of circulating credit is obtained through the machinery of rediscounting commercial paper, through direct collateral loans—machinery common to most central banks—and through open-market operations. The old-time stone-wall reserve requirements are done away with, and there is no limit below which a legal reserve cannot now be reduced *provided* the bank concerned is willing to pay the price. An elastic asset bank-note currency is superimposed upon the old rigid bank-note currency, although out of deference to the opinions of certain persons of high political influence in 1913, who believed that the issuance of bank notes was an exercise of the essentially government function of issuing money, the Federal Reserve notes are made to emanate from the government and made subject to a government interest charge, at the discretion of the Federal Reserve Board—a charge that has never been imposed. The Federal Reserve notes therefore, in form, have some of the qualities of government paper money, but, in substance, are almost a pure asset currency possessing a government guaranty, against which contingency the government has made no provision whatever.

When the Glass-Owen bill was before Congress the provisions looking toward the parring of checks through the establishment of an extensive clearing and collection system were widely opposed by bankers, who claimed that they were the work of theorists and visionaries. The subsequent development of this clearing and collection system has gone beyond the dreams of the most visionary of the visionaries of 1913.

The extension of the use of bank acceptances and of dollar exchange in the United States, and the development of a broad and active discount market for paper arising out of foreign trade—objects clearly sought by the Federal Reserve Act—were substantially attained much more rapidly than had been expected, as a result of the dominant position in the world's trade and finance which New York obtained, temporarily at least, through the War.

The movement in the direction of making the Federal Reserve Banks the exclusive depositaries of Federal government funds was checked by our entrance nto the War; but, as a result of the discontinuance of the subtreasuries, the fiscal agency functions of the Federal Reserve System which were enormously enlarged by the War, have since been still further extended.